



## OWNER'S MANUAL

Please Read the Manual First before Operation

# PT590AU

5.1 Channel 350 Watts Built-In AM/FM Radio/  
USB/SD Card HDMI Amplifier Receiver



## Important Safety Information

### For Customers

Thank you for purchasing the HDMI receiver. We strongly recommend that you carefully study the operating instructions before attempting to operate the unit and that you note the listed safety information.

### Caution

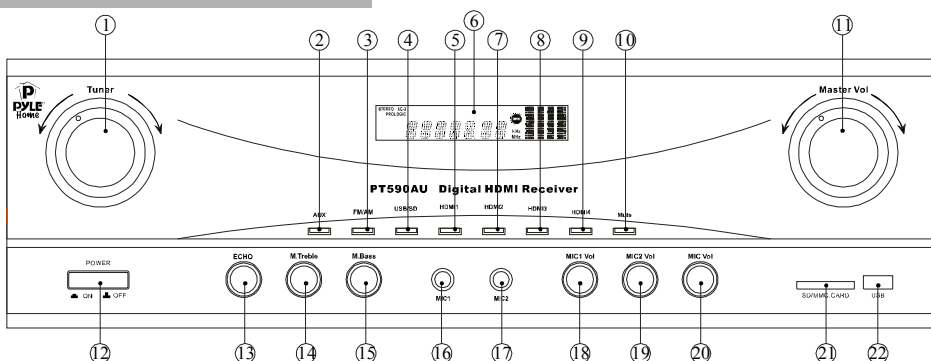
You are cautioned that changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

- To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- To prevent fire, do not cover the ventilation of the apparatus with newspapers, table-cloths, curtains and etc. Do not place lighted candles on the apparatus.
- To prevent fire or shock hazard, do not place objects filled with liquid, such as vases, on the apparatus.
- Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.
- Install this system so that the power cord can be unplugged from the wall socket immediately in the event of trouble.
- Batteries or batteries installed apparatus shall not be exposed to excessive heat such as sunlight or fire.

## System Features

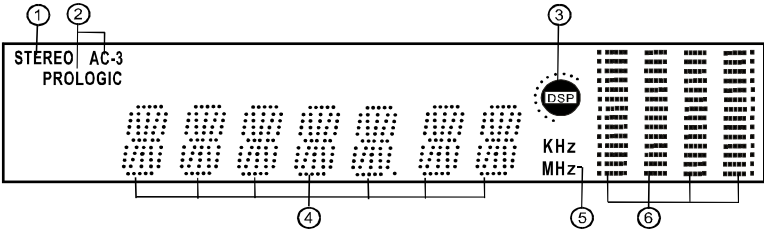
- 5.1 Channel Amplifier.
- 4 HDMI Input Port and 1 HDMI Output Port for HDMI Receiver and HDMI Switcher.
- One Key Switch Function Between HDMI Receiver and HDMI Switcher.
- Built-In AM/FM Radio.
- Built-In USB and SD Audio.
- 2 MIC Input, Treble and Bass of MIC Adjustable, Independent MIC Volume Control.
- Over Current Protection, Short Circuit Protection And Over Voltage Protection.
- 12 Preset Radio Station.
- Full Remote Control.
- VFD Display.
- Power Output: 300 Watts L/R Channel (4 Ohm) 50W for Center, Surround L and Surround R(4 Ohm).
- Inout Selector: 4 in 1 out HDMI Selector, 3 Stereo RCA Selector, 1AM/FM Radio, 1 USB/SD, 2 Microphone Input.
- Output: 5 Channel Speaker Output Terminal for L, R, Center, SL, SR, And 1 line Out for Subwoofer.
- Total Power Consumption: 350W.

## Front Panel Function



- |                                   |                                    |                                  |
|-----------------------------------|------------------------------------|----------------------------------|
| 1. Tuner band adjustment knob.    | 8. HDMI3 input selector.           | 15. Mic bass adjustment knob.    |
| 2. AUX1/AUX2/AUX3 input selector. | 9. HDMI4 input selector.           | 16. Mic1 input socket.           |
| 3. FM/AM input selector.          | 10. Mute control selector.         | 17. Mic2 input socket.           |
| 4. USB/SD input selector.         | 11. Master volume adjustment knob. | 18. Mic1 volume adjustment knob. |
| 5. HDMI1 input selector.          | 12. Power on/off selector.         | 19. Mic2 volume adjustment knob. |
| 6. VFD display window.            | 13. Mic echo adjustment knob.      | 20. Mic volume adjustment knob.  |
| 7. HDMI2 input selector.          | 14. Mic treble adjustment knob.    | 21. SD/MMC card input socket.    |
|                                   |                                    | 22. USB input socket.            |

# Front Panel Display Window



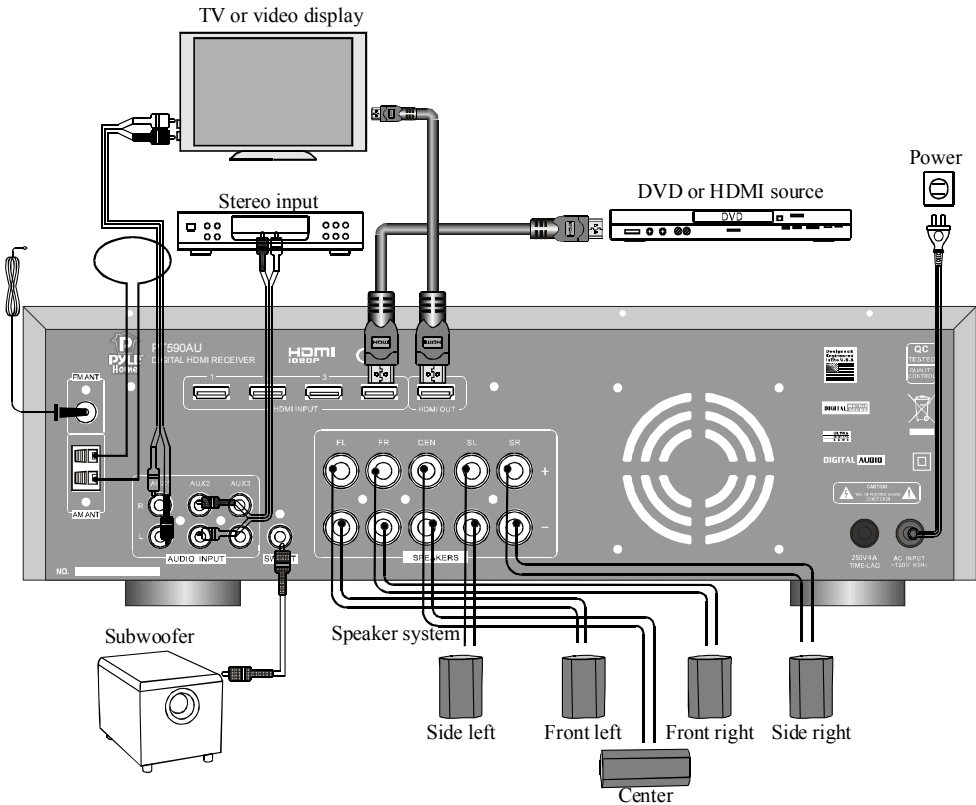
## Name

1. STEREO	AUX/TUNER/USB/SD INPUT
2. AC-3 PROLOGIC	HDMI INPUT
3. DSP	DSP STATE ICON
4. DIGITAL DISPLAY	
5. KHz MHz	KHz MHz ICON
6. SPECTRUM DISPLAY	

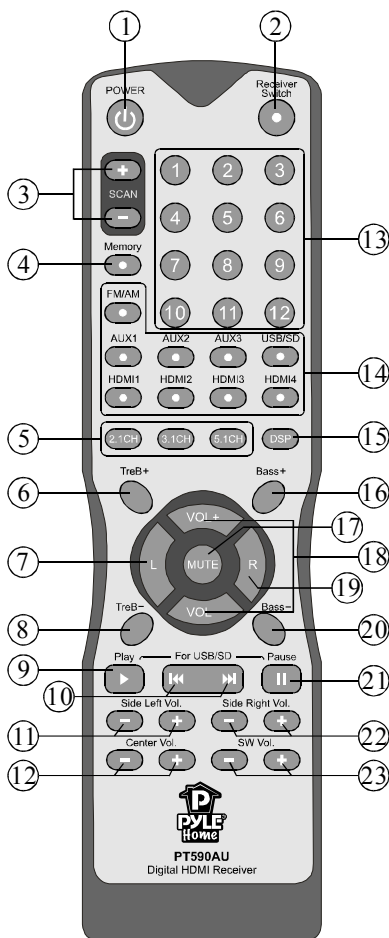
## Function

Light up when AUX1/2/3, FM/AM, USB/SD input.
Light up when 5.1 channel or HDMI1/2/3/4 input.
Light up when play DSP effect.
Light up to display value of current input mode.
Light up when tuner input is selected and indicates the value on the display for KHz/MHz.
Light up to display the spectrum of different channel.

# Real Panel Connectors



## Using the Remote Control



- 1.Power on/off control selector
- 2.HDMI audio switch selector
- 3.Tuner band control selector
- 4.Tuner memory selector
- 5.Channel source output selector
- 6.Treble volume increase selector
- 7.Left balance selector
- 8.Treble volume decrease selector
- 9.USB/SD play selector
- 10.USB/SD-skip selector
- 11.Side left volume adjustment selector
- 12.Center volume adjustment selector
- 13.Tuner number selector
- 14.Input mode selector
- 15.DSP control selector(live, hall, church)
- 16.Bass volume increase selector
- 17."Mute mode" control selector
- 18.Master volume control selector
- 19.Right balance selector
- 20.Bass volume decrease selector
- 21.USB/SD pause selector
- 22.Side right volume adjustment selector
- 23.Subwoofer volume adjustment selector

## Battery Installation


- 1.On the back of the remote control, push the tab and lift off the battery cover.
- 2.Obtain two (2) fully-charged AAA batteries. Match the "+" and "-" marks on the batteries to the "+" and "-" marks in the battery case, then insert the new batteries.
- 3.Align the cover keys with the case holes and press the cover back into place. The tab should click when the cover is locked.
- 4.Test the unit by pressing POWER or any mode key. If the batteries are inserted correctly, the selected mode key will blink once.

## Note



- Do not leave the remote control in an extremely hot or humid place.
- Do not use a new battery with old ones.
- Do not mix manganese batteries with other kinds of batteries.
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.
- If you do not intend to use the remote control for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

## Basic Operation

### Turn on/off the Power

Press " " key to control the power on and off.


### Master Volume Control

Press the " " or " " Key to adjust the main channel volume.


### Side Left Channel Volume Control

Press " " key, screen display the SL volume, press "-ADJUST+" key to adjust side left channel volume.


### Side Right Channel Volume Control

Press " " key, screen display the SR volume, press "-ADJUST+" key to adjust side right channel volume.



### Center Channel Volume Control

Press " " key, screen display the CEN volume, press "-ADJUST+" key to adjust center channel volume.



### Subwoofer Volume Control

Press " " key, screen display the SW volume, press "-ADJUST+" key to adjust subwoofer channel volume.





### How to Adjust Treble

Press " " " key to adjust the treble output of the main channel.




### How to Adjust Bass

Press " " " key to adjust the bass output of the main channel.

### How to Play HDMI

Make sure HDMI1/2/3/4 connection lines are correct, Press the " " " " " key to play HDMI.

### How to Play AUX


Make sure AUX1/2/3 connection lines are correct, Press the " " " " key to play AUX.


### How to Play USB/SD


#### 1.Select USB/SD Input Mode

Make sure USB or SD card insert to the USB/SD socket, Press the " " key to select USB/SD input mode.

#### 2.USB/SD Control





" ": Control the USB/SD play.

" ": Control the USB/SD pause.



" ": Control the USB/SD skip.

### How to Play Tuner




#### 1.Select Program

Use " " key to select FM/AM band. Press the " "key to adjust the band of tuner. Press the " "key for 2 seconds, the FM will search automatically. You can press the " "key once to stop the function.


#### 2.Listen to the Preset Program

Press the number keys " - " to select the radio program that you already saved. Once selected, screen will display the radio program's frequency in the memory area.


#### 3.Memory Program

When you receive a clear radio program, press the " " key first, and then the screen displays the "Memory" icon. Press one of the 12 " - " number key on the remote control to select the memory station. If you want to extract the channel you saved, just press the number key you selected.




### How to Mute

Press " " key to turn sound off/on.Press again to restore the audio to the original level.

### Introduction of DSP Control Key

Press the key " " repeatedly to switch to different operations: Live, Hall or Church. All the above functions can give different sound effects.

### Introduction of Source Output Selector Area

Press " " key to receive 5.1 channel(default mode); Press " " key to receive 3.1 channel(SL, SR mute); Press " " key to receive 2.1 channel(SL, SR, CEN mute).

## Trouble Shooting

Use this chart to help you solve operational problems. If there are any problems that can not be solved, please contact Service Center.

Problem	Possible Reasons	Solutions
<b>Can't get through power supply</b>	The plug is not inserted properly.	Check power supply and plug.
	The socket has no power.	Check socket and power supply.
<b>Display can't be turned on</b>	The fuse is broken.	Replace the fuse.
	Have not pressed "POWER" button.	Press the "POWER" button again.
<b>No sound at all</b>	Incorrect selection of input signal.	Read the manual carefully again.
	The wire and lead are not connected correctly.	Check the wire and lead.
	The mute state is turned on.	Turn off the mute state.
	Sound source machine is not powered.	Turn on the power of sound source.
<b>Neither of the main channels have sound</b>	The speaker line is not connected properly.	Read the manual.
	The signal plug is connected incorrectly or lines are short-circuited.	Check the connection of the signal plug.
<b>Center channel has no sound.</b>	The speaker line is not connected properly.	Read the manual.
	Mode is not set properly.	Mode should be set that the center channel has output.
<b>Side Surround channels have no sound</b>	The speaker line is not connected properly.	Read page 3 of the manual.
	Mode is not set properly.	Mode should be set that the surround channel has output, for example, 5.1 channel.
<b>The sound of surround channel is low</b>	The sensitivity of speakers is too low.	
	The volume is set too low.	Reset volume.
	The input signal is STEREO.	Change to 5.1 channel.
<b>The sound of center channel is low.</b>	The sensitivity of speakers is too low.	
	The volume is set too low.	Reset volume.
<b>Sound from speakers is out of order</b>	Speakers are located inappropriately.	Read the manual.
	The lines are not connected properly or the Disc is defective.	
<b>No sound when you choose HDMI input</b>	Sound source machine is not powered.	Turn on the power of sound source.
	The HDMI line is not connected properly.	Read the manual.
	Sound source machine doesn't set the HDMI out mode	Set the Sound source machine to HDMI out mode
<b>Can't operate or display normally</b>	Affected by exterior strong disturbance.	Turn off first then turn on again.
		Avoid direct sunlight/heat.

<b>Radio</b>		
<b>The FM reception is poor.</b>	Need outdoor antenna.	Stretch the FM antenna of the receiver in the rear panel. But please don't connect the receiver to an outdoor FM antenna on raining days.
<b>Radio stations cannot be tuned in.</b>	Check that the antennas are connected securely.	Adjust the antennas and connect an external antenna, if necessary.
	The signal strength of the stations is too weak (when tuning in with automatic tuning).	Adjust manually
	No stations have been preset or the preset stations have been cleared (tuning by scanning preset stations).	Make sure you set the tuning interval correctly.
<b>The remote control does not function.</b>	Obstacles exist between the remote and the receiver.	Remove any obstacles in the path between the remote and the receiver.
	The remote batteries are weak.	Replace all batteries in the remote control with new ones.
	Incorrect input selection on the remote control.	Make sure you select the correct input on the remote control.
<b>Error messages</b>	If appears a message, there may be a malfunction.	You can check the condition of the system by the message.
	Should any problems persist.	Consult your nearest Paramax dealer.
<b>Protect</b>	Irregular current is output to the speakers. The receiver will automatically turn off after a few seconds.	Check the speaker connection then turn on the power again.